

IN THE CLAIMS:

Please also amend claims 1, 2, 12-21, 23, 24, 26, and 27, **and add** new claim 28-43, as shown in the complete list of claims that is presented below.

1. (currently amended) A parking lot management system comprising:
a sever for managing parking information about a parking lot having a plurality of parking spaces;

a plurality of wireless LAN base stations installed in the parking lot for wirelessly transmitting and receiving the parking information, each of the plurality of wireless LAN base stations having a transmittable and receivable area, the plurality of wireless LAN base stations forming a wireless LAN system such that each of the plurality of wireless LAN base stations can wirelessly connect to a wireless LAN first mobile station of a first mobile object when the first mobile object exists in its own transmittable and receivable area, and to a wireless LAN second mobile station of a second mobile object when the second mobile object exists in its own transmittable and receivable area; and

communication means for communicating the parking information between the plurality of wireless LAN base stations and the server via an IP network operating with internet protocol,

wherein the wireless LAN mobile stations and the server can communicate the parking information through the wireless LAN system and the communication means, [[and]]

wherein the wireless ~~mobile~~ LAN first mobile station of the first mobile object has unique first identifying information, and accepts or rejects an incoming wireless signal depending on whether identification information in the incoming wireless signal matches the unique first identifying ~~information-~~ information, and

wherein the wireless LAN second mobile station of the second mobile object has unique second identifying information, and accepts or rejects an incoming wireless signal depending on whether identification information in the incoming wireless signal matches the unique second identifying information.

2. (currently amended) [[The]] A parking lot management system ~~according to claim 1 further~~ comprising:

a sever for managing parking information about a parking lot having a plurality of parking spaces;

a plurality of wireless LAN base stations installed in the parking lot for wirelessly transmitting and receiving the parking information, each of the plurality of wireless LAN base stations having a transmittable and receivable area, the plurality of wireless LAN base stations forming a wireless LAN system such that each of the plurality of wireless LAN base stations can wirelessly connect to a wireless LAN mobile station of a mobile object when the mobile object exists in its own transmittable and receivable area; and

communication means for communicating the parking information between the plurality of wireless LAN base stations and the server via an IP network operating with internet protocol,

a plurality of parking condition detection devices respectively corresponding to the plurality of parking spaces,

wherein the wireless LAN mobile station and the server can communicate the parking information through the wireless LAN system and the communication means,

wherein the wireless LAN mobile station of the mobile object has unique identifying information, and accepts or rejects an incoming wireless signal depending on whether identification information in the incoming wireless signal matches the unique identifying information,

wherein parking space identification information is provided at each parking space to identify the respective parking space,

wherein each of the plurality of parking condition detection devices includes parking condition detecting means for detecting a parking condition showing whether the corresponding parking space is occupied or not by a vehicle, and outputs a parking condition signal showing the parking condition, the parking condition detecting means including an optical sensor, and the parking condition information signal indicating that the corresponding parking space is not occupied by a vehicle if the optical sensor can sense the parking space identification information that is provided at the corresponding parking space and indicating that the corresponding parking space is occupied by a vehicle if the optical sensor cannot sense the parking space identification information that is provided at the corresponding parking space,

wherein the server includes parking condition registration means for identifying and registering the parking condition signal per each parking space,

wherein the wireless LAN system is configured such that each of the plurality of wireless LAN base stations is wirelessly connected to the corresponding parking condition detection devices within its own transmittable and receivable area, and

wherein the parking information is communicated between the plurality of parking condition detection devices and the server through the wireless LAN system and the communication means, and the parking condition signal is supplied to the server so as to be registered by the parking condition registration means.

3. (original) The parking lot management system according to claim 2, wherein the server periodically outputs a parking condition detection request signal, which requests detection of the parking condition, to each of the plurality of parking condition detection devices through the wireless LAN system and the communication means, and each of the parking condition detection devices detects the parking condition in response to the parking condition detection request signal.

4. (previously presented) The parking lot management system according to claim 2, wherein the parking space identification information comprises a barcode.

5. (original) The parking lot management system according to claim 2, wherein the server includes parking condition information generating means for extracting the registered parking condition signal and for generating a parking condition information signal which indicates the parking condition, and

the server supplies the parking condition information signal to the wireless LAN mobile station through the wireless LAN system and the communication means.

6. (original) The parking lot management system according to claim 5, wherein the mobile object generates a parking condition information request signal requesting parking condition information and supplies the parking condition information request signal to the wireless LAN mobile station,

the parking condition information generating means generates the parking condition information signal in response to the parking condition information request signal, and

the parking condition information request signal is supplied from the wireless LAN mobile station to the server through the wireless LAN system and the communication means.

7. (original) The parking lot management system according to claim 6, wherein the server detects a certain number of parking spaces near the wireless LAN mobile station in response to the parking condition information request signal, and

the parking condition information generating means extracts the parking condition signals respectively corresponding to the certain number of parking spaces and generates the parking condition information signals.

8. (original) The parking lot management system according to claim 5, wherein the parking condition information signal includes a voice signal which indicates a non-occupied parking space by voice.

9. (previously presented) The parking lot management system according to claim 8, wherein the mobile object has software to produce the voice in response to the voice signal.

10. (original) The parking lot management system according to claim 5, wherein the parking condition information signal includes an image signal which displays a map near the wireless LAN mobile station and indicates a non-occupied parking space in the displayed map.

11. (previously presented) The parking lot management system according to claim 10, wherein the mobile object has software to display the map and the non-occupied parking space in response to the image signal.

12. (currently amended) The parking lot management system according to claim 1, wherein the server includes vehicle position registration means for identifying and

registering ~~[[a]]~~ vehicle position ~~signal~~ signals, which shows a vehicle position, in connection with the wireless LAN ~~first and second mobile station~~ stations,

the mobile ~~first and second object~~ objects ~~generates~~ generate the vehicle position ~~signal~~ signals and ~~supplies~~ supply the vehicle position ~~signal~~ signals to the wireless LAN mobile stations, and

the vehicle position ~~signal~~ signals ~~[[is]]~~ are supplied from the wireless LAN mobile station to the server through the wireless LAN system and the communication means.

13. (currently amended) The parking lot management system according to claim 12, wherein the server includes vehicle position information generating means for extracting the registered vehicle ~~position~~ positions and for generating ~~[[a]]~~ vehicle position information ~~signal~~ signals which indicates the vehicle ~~position~~ positions, and

the vehicle position information ~~signal~~ signals ~~[[is]]~~ are supplied from the server to the wireless LAN ~~first and second mobile station~~ stations through the wireless LAN system and the communication means.

14. (currently amended) The parking lot management system according to claim 13, wherein the ~~first and second mobile object~~ objects ~~generates~~ generate ~~[[a]]~~ vehicle position information request ~~signal~~ signals requesting vehicle position information and ~~supplies~~ supply the vehicle position information request ~~signal~~ signals to the wireless LAN mobile stations,

the vehicle position information generating means generates the vehicle position information ~~signal~~ signals in response to the vehicle position information request ~~signal~~ signals,

the vehicle position information request ~~signal~~ signals ~~[[is]]~~ are supplied from the wireless LAN mobile stations to the server through the wireless LAN system and the communication means.

15. (currently amended) The parking lot management system according to claim ~~[[13]]~~ 14, wherein the vehicle position information ~~signal~~ signals ~~include~~ include ~~[[a]]~~ voice ~~signal~~ signals which indicates the vehicle position by voice.

16. (currently amended) The parking lot management system according to claim 15, wherein the first and second mobile ~~object~~ has objects have software to prepare and utter ~~[[the]]~~ voice messages to indicate the vehicle ~~position~~ positions in response to the voice ~~signal~~ signals.

17. (currently amended) The parking lot management system according to claim 13, wherein the vehicle position information ~~signal~~ includes signals include ~~[[an]]~~ image ~~signal~~ signals which ~~displays~~ display a map near the respective wireless LAN mobile station and indicates the vehicle position.

18. (currently amended) The parking lot management system according to claim 17, wherein the software displays the map and the vehicle ~~position~~ positions in response to the image ~~signal~~ signals.

19. (currently amended) The parking lot management system according to claim 13, wherein the plurality of parking spaces respectively ~~[[has]]~~ have lighting systems to indicate the vehicle ~~position~~ positions,

the vehicle position information ~~signal~~ signals includes ~~[[a]]~~ lighting control ~~signal~~ signals to indicate the vehicle ~~position~~ positions by activating ~~[[one]]~~ corresponding ones of the plurality of lighting systems,

the wireless LAN system is configured such that the plurality of wireless LAN base stations are wirelessly connected to the plurality of lighting systems within the respective transmittable and receivable areas,

the lighting control ~~signal~~ signals are supplied from the server to the one of the plurality of lighting systems through the wireless LAN system and the communication means, and

the one of the plurality of lighting systems ~~[[are]]~~ is activated in response to the lighting control ~~signal~~ signals.

20. (currently amended) The parking lot management system according to claim 1, wherein additional wireless LAN base stations are provided at an entrance and an exit of the parking lot,

the wireless LAN system is configured such that the wireless LAN base stations provided at the entrance and the exit are wirelessly connected to the mobile object within respective transmittable and receivable areas so as to detect entering or exiting of the wireless LAN first and second mobile station stations into and from the parking lot,

an entering signal and an exiting signal showing the entering and the exiting of each of the wireless LAN first and second mobile station stations are generated by the wireless LAN base stations provided at the entrance and the exit,

the entering ~~signal~~ signals and the exiting ~~signal is~~ signals are supplied to the server by the communication means, and

the server detects entering time and exiting time based on the supplied entering ~~signal~~ signals and the exiting ~~signal~~ signals, so that the entering time is identified and registered in connection with each of the wireless LAN first and second mobile station stations, and that the exiting time is identified and registered in connection with each of the wireless LAN first and second mobile station stations having the registered entering time.

21. (currently amended) The parking lot management system according to claim 20, wherein each of the wireless LAN first and second mobile station generates a parking time request signal requesting a presentation of a parking time and/or a parking fee,

the parking time request ~~signal is~~ signals are supplied to the server through the wireless LAN system and the communication means,

the server extracts the entering ~~time~~ times of the wireless LAN first and second mobile stations in response to the parking time request ~~signal~~ signals, and calculates the parking ~~time~~ times and the parking ~~[[fee]]~~ fees based on lapsed time since the entering time times, and present time, so as to generate ~~[[a]]~~ parking time information ~~signal~~ signals presenting the parking ~~time~~ times and the parking fee fees, and

the parking time information ~~signal is~~ signals are supplied from the server to the wireless LAN mobile stations through the wireless LAN system and the communication means.

22. (original) The parking lot management system according to claim 21, wherein at least one more wireless LAN base stations is provided at a store which ties up with the parking lot so that the parking information can be communicated at the store.

23. (currently amended) The parking lot management system according to claim 1, wherein the first and second mobile ~~object is~~ objects are a portable communication device devices.

24. (currently amended) The parking lot management system according to claim 23, wherein the portable communication ~~device is a telephone~~ devices are telephones.

Claim 25 (cancelled).

26. (currently amended) The parking lot management system of claim ~~[[25]]~~ 1, wherein the first and second mobile ~~object is~~ objects are a portable communication device devices carried by ~~a driver~~ drivers of ~~[[a]] vehicle~~ vehicles, and wherein the server stores position information about the ~~vehicle~~ vehicles when the ~~vehicle is~~ vehicles are parked based on the first and second identification information.

27. (currently amended) The parking lot management system according to claim 1, wherein the incoming wireless signal supplies information from the server about available parking spaces that are near the first and second mobile ~~object~~ objects.

28. (new) The parking lot management system according to claim 2, wherein the server includes vehicle position registration means for identifying and registering a vehicle position signal, which shows a vehicle position, in connection with the wireless LAN mobile station,

the mobile object generates the vehicle position signal and supplies the vehicle position signal to the wireless LAN mobile station, and

the vehicle position signal is supplied from the wireless LAN mobile station to the server through the wireless LAN system and the communication means.

29. (new) The parking lot management system according to claim 28, wherein the server includes vehicle position information generating means for extracting the

registered vehicle position and for generating a vehicle position information signal which indicates the vehicle position, and

the vehicle position information signal is supplied from the server to the wireless LAN mobile station through the wireless LAN system and the communication means.

30. (new) The parking lot management system according to claim 29, wherein the mobile object generates a vehicle position information request signal requesting vehicle position information and supplies the vehicle position information request signal to the wireless LAN mobile station,

the vehicle position information generating means generates the vehicle position information signal in response to the vehicle position information request signal,

the vehicle position information request signal is supplied from the wireless LAN mobile station to the server through the wireless LAN system and the communication means.

31. (new) The parking lot management system according to claim 30, wherein the vehicle position information signal includes a voice signal which indicates the vehicle position by voice.

32. (new) The parking lot management system according to claim 31, wherein the mobile object has software to prepare and utter the voice to indicate the vehicle position in response to the voice signal.

33. (new) The parking lot management system according to claim 29, wherein the vehicle position information signal includes an image signal which displays a map near the wireless LAN mobile station and indicates the vehicle position.

34. (new) The parking lot management system according to claim 33, wherein the software displays the map and the vehicle position in response to the image signal.

35. (new) The parking lot management system according to claim 29, wherein the plurality of parking spaces respectively has lighting systems to indicate the vehicle position,

the vehicle position information signal includes a lighting control signal to indicate the vehicle position by activating one of the plurality of lighting systems, the wireless LAN system is configured such that the plurality of wireless LAN base stations are wirelessly connected to the plurality of lighting systems within the respective transmittable and receivable areas, the lighting control signal is supplied from the server to the one of the plurality of lighting systems through the wireless LAN system and the communication means, and the one of the plurality of lighting systems are activated in response to the lighting control signal.

36. (new) The parking lot management system according to claim 2, wherein additional wireless LAN base stations are provided at an entrance and an exit of the parking lot,

the wireless LAN system is configured such that the wireless LAN base stations provided at the entrance and the exit are wirelessly connected to the mobile object within respective transmittable and receivable areas so as to detect entering or exiting of the wireless LAN mobile station into and from the parking lot,

an entering signal and an exiting signal showing the entering and the exiting of the wireless LAN mobile station are generated by the wireless LAN base stations provided at the entrance and the exit,

the entering signal and the exiting signal is supplied to the server by the communication means, and

the server detects entering time and exiting time based on the supplied entering signal and the exiting signal, so that the entering time is identified and registered in connection with the wireless LAN mobile station, and that the exiting time is identified and registered in connection with the wireless LAN mobile station having the registered entering time.

37. (new) The parking lot management system according to claim 36, wherein the wireless LAN mobile station generates a parking time request signal requesting a presentation of a parking time and/or a parking fee,

the parking time request signal is supplied to the server through the wireless LAN system and the communication means,

the server extracts the entering time in response to the parking time request signal, and calculates the parking time and the parking fee based on the entering time and present time, so as to generate a parking time information signal presenting the parking time and the parking fee, and

the parking time information signal is supplied from the server to the wireless LAN mobile station through the wireless LAN system and the communication means.

38. (new) The parking lot management system according to claim 37, wherein at least one more wireless LAN base stations is provided at a store which ties up with the parking lot so that the parking information can be communicated at the store.

39. (new) The parking lot management system according to claim 2, wherein the mobile object is a portable communication device.

40. (new) The parking lot management system according to claim 39, wherein the portable communication device is a telephone.

41. (new) The parking lot management system of claim 2, wherein the mobile object is a portable communication device carried by a driver of a vehicle, and wherein the server stores position information about the vehicle when the vehicle is parked based on the identification information.

42. (new) The parking lot management system according to claim 2, wherein the incoming wireless signal supplies information from the server about available parking spaces that are near the mobile object.

43. (new) The parking lot management system according to claim 1, wherein the first identifying information and the second identifying information are stored in the server.